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## Effects of teaching problem solving strategies to parents of pre-teens: a study of family relationship

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### Abstract

The purpose of the present research was to evaluate the efficacy of problem solving workshops designed for parents of pre-teens. In these workshops topics such as understanding others' emotions, ideas, and motivations, as well as finding various solutions for a problem, were taught. Participants included 96 mothers of students in private schools. These mothers were instructed in five workshops lasted ten sessions, two hours each. Three subscales of Family Assessment Device (FAD) were used before and after the workshops: communication, affective responsiveness, and affective involvement. Analysis of data indicates that the workshops had positive effects on subjects' performance in "affective involvement".

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*Keywords:* problem solving, parent training, parenting style, family assessment;

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### 1. Introduction

Problem solving skill and decision-making have been the focus of a large body of research. Some individuals are not able to solve even their daily routine problems; therefore, once confronted by the slightest problem or in the moment of making a decision, would panic and they would be confused. On the contrary, other individuals may easily confront challenging situations. The key to their success could be attributed to the fact that they follow an organized and systematic plan to solve their problems or to make a decision. Each new challenging problem creates a stressful situation for the first group who lack problem solving skills; and as long as they are unable to comprehend the problem, the stress factor will increase. Teaching clues to identify problems and different approaches to solve them is part of parent's responsibilities. Problems may occur at any level, from simple to more complicated. In the problem solving method, without disparaging children's self-confidence, parents try to help them to think about their problems and seek different solutions and eventually choose the best one to overcome the challenging situation. In addition, children will learn the proper way of dealing with daily problems without causing any further stress (Twerski & Shwartz 2005).

Problem solving skill is one of the most advanced functions of the mind and its acquisition requires proper training. Problem-solving skills comprise of a complex combination of cognitive, behavioural, and attitudinal

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factors. Mayer (1983) defines the problem-solving skill as a multiple process in which the individual needs to recognize the connection between previous experience and existing problem. Only in this case, we will be able to find a proper resolution. Three characteristics proposed for problem-solving skill are as follow:

1. Problem solving is a cognitive process but will be manifested through behaviour.
2. Finding a solution is a consequence of problem-solving process.
3. Problem solving requires manipulation or acting upon previous experiences (Funkhouser & Dennis, 1992).

Different methods were proposed for the problem-solving skills; one of them known as IDEAL (First initials of the steps taken in this process). In this method five steps are suggested:

1. Identifying the problem
2. Defining the problem and gathering related information
3. Exploring possible solutions
4. Acting upon found solutions
5. Look back on previous steps and evaluating results (Bransford & Stein, 1984).

In another method, the problem-solving process is presented in three steps:

1. Representation of the problem: The individual calls upon his/her previous knowledge and find a solution based on his/her assessment of the present situation.
2. Solution Seeking: The individual looks for different solutions to achieve expected goals.
3. Implementation of the Solution: The individual uses the solutions and assess the results (Kerkley, 2003).

It seems that in most of the problem solving methods, some steps such as identifying the problem, analyzing, and finding the solution are considered as the key components. If the individual has a problem in one or more areas, the problem cannot be solved properly. Therefore, it is crucial to pay a particular attention to these steps. (Wehmeyer, Lattin & Agran, 2001).

Research shows that individuals who are deficient in problem solving skills will show impulsive behaviour when they face with difficulties. They become frustrated and aggressive; and in order to avoid further conflicts, they will withdraw from the society. Recurrence of such situation may result in maladaptive behaviours (Shure, 2001).

Individuals equipped with problem solving skills can adapt logical solutions in successive steps for solving their problems; they can anticipate potential obstacles in the process of solving the problem and seek a proper solution for them (Spivack&Levine, 1963). A study on the withdrawal or impulsive behaviours of children at the age of four to six shows that these children do not have clear understanding of other individual's feelings and cannot seek alternative solutions, nor can anticipate consequences of their acts(Shure & Spivack,1982).

Morton (2005) studied the effect of problem solving skills on the students who are on the brink of educational failure. His study showed that problem solving skills has a positive effect on their behaviours and will enhance their desire for studying. In addition, the problem solving skill will decrease some of the factors involved in drop off. Controlling environment is one of the variables that have a different meaning after the acquisition of problem solving skill. The sense of having control over the situation has an undeniable effect on the educational progress. When students realize that they have the power to control the situation, they will feel more responsible and will no longer attribute their success or failure to the external factors.

## 2. Methodology

The present study is a semi-experimental research with the pre and post-testing without control group. The sample consists of 96 mothers of teenagers studying in private schools in Tehran. This group was brought together following the school announcement, and explanatory session held for parents and at the end, parent volunteers were enrolled for the workshop. Data was gathered in two steps, before and after the workshops. The questionnaires of

the participants who had missed either pre or post tests were not included in the final analysis. Eventually, 96 questionnaires of each step were analyzed.

### 2.1. *Instrument*

Family Assessment Device (FAD) was used in this study which has 60 questions designed based on Mac Master Model of family functioning (Epstein, Baldwin & Bishop, 1983). It has seven subscales: Problem solving, communication, roles, affective responsiveness, affective involvement, behavior control, and general functioning. Three subscales were used in our workshops: communication, affective responsiveness and affective involvement. The internal consistency of this tool was reported between 0.72- 0.92 and reliability coefficient based on test-retest was 0.66 to 0.76. The validity of the questionnaires was studied based on the evaluations of therapists about the functional and dysfunctional families. Results show that FAD has the ability of distinguishing between functional and dysfunctional families. Correlation of FAD with other tools measuring family functions are reported to be high (Miller, Epstein, Bishop, & Keitner, 1985).

### 2.2. *Raising a Thinking Preteen Workshop*

The workshop for raising a thinking preteen presents problem solving skills to parents of students at the ages of 8 to 12 years. In this method, parents learn not to show any immediate reaction to the difficult behaviour of their children, but to encourage them to think about the various possible solutions and to choose the most appropriate one. The most important skills learned in these workshops are:

1. **Understanding feeling and opinions of others:** Through this skill, children learn that people might have different opinions and feelings about the same issue.
2. **Understanding objectives (intentions):** By acquiring this skill, children learn that they have to have a specific purpose and reason for all their actions. They also realize that not all intentions are obvious for others.
3. **Seeking different solutions:** This skill help children to find as many solutions as they possibly could for their problems
4. **Considering the consequences of their acts:** This skill will show children how to recognize the consequences of their deeds in the future
5. **Consecutive planning:** This skill encourages children to plan their schedule systematically (step-by-step). They will be able to anticipate potential complications and obstacles within allocated timing.

This workshop has a workbook in which different activities and discussions are included. These activities and discussions encourage children's participation in the process of decision-making. It will also increase children's social skills and help them to have a better understanding of their own feelings (Shure, 2001).

## 3. *Findings*

T-dependent test was used to compare scores of participants in pre and post testing situations. Results showed an increase in affective involvement in post-test. For the two other factors, communication and affective responsiveness, the change in the post testing is not significant.

Table 1. Mean, Standard Deviation, and results of dependent t- test for pre and post tests

Factors	Pre-Test		Post-Test		difference of Means	SD	t	df	Sig
	M	SD	M	SD					
<b>Communication</b>	3/15	0/16	3/16	0/13	0/01	0/34	0/24	95	0/81
<b>Affective Responsiveness</b>	3/22	0/26	3/18	0/26	-0/04	0/50	0/64	95	0/52
<b>Affective Involvement</b>	3/26	0/20	3/45	0/19	0/19	0/40	2/10	95	0/04

#### 4. Conclusion

Parenting style and the quality of parent-child relationship could be an indicator of child's personality, possible psychological disorders, and success or failure of children in the future. Therefore, learning proper parenting strategies are crucial for parents. Family training is one of the most important preventive approaches to avoid childhood disorders and improvement of family functions. Studying the problem solving skill and its role in improving family relationships was the main objective of the present study.

Findings of this study shows that participating in workshops increased affective involvement of family members, which eventually results in solving communication problems. As it was mentioned before, the content of these workshops was designed to increase interaction between parents and their children, which leads to the raise of affective involvement. Lack of any significant difference in communication, and affective responsiveness (between pre and post testing) could be attributed to the lack of ample time for practicing. It seems that enhancing affective responsiveness and betterment of relationship requires more time; indeed, the FAD questionnaires were presented to parents' right after the end of workshops while many parents were dealing with the new strategies that were very different from their original approaches.

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